WHAT IS CLAIMED IS:

1. A solvent-free filling material comprising a filler, a thermosetting resin, a curing agent, and a curing catalyst, wherein the thermosetting resin is an epoxy resin, and the curing agent is a dicyandiamide curing agent.

2. The filling material according to claim 1, wherein the curing catalyst comprises a urea compound.

3. The filling material according to claim 1, wherein the dicyandiamide curing agent has at least one form selected from the group consisting of powders, dendrites, and flakes.

4. The filling material according to claim 1, wherein the filler is substantially spherical particles having an average particle size of 0.1 to 12 μm and a maximum particle size of 75 μm or smaller.

5. A multilayer printed wiring board comprising a substrate, a plated through-hole, the filling material according to claim 1 filling the plated through-hole, and a conductor layer formed on an exposed surface of the filling material in the plated through-hole.

6. The multilayer printed wiring board according to

claim 5, which further comprises: an insulating layer formed on a surface of the conductor layer; a conductor pattern layer formed on a surface of the insulating layer so that the conductor layer, the insulating layer and conductor pattern layer are provided in this order; and a via conductor which electrically connects the conductor layer and the conductor pattern layer.

7. The multilayer printed wiring board according to claim 5, wherein the plated through-hole has a diameter of 200 μm or smaller.

8. A process for producing a multilayer printed wiring board comprising the steps of filling a plated through-hole of a substrate with the filling material according to claim 1, curing the filling material, and forming a conductor layer on the filling material exposed on a surface of the substrate.

9. The process according to claim 8, which further comprises the steps of: laminating the conductor layer with an insulating layer; making a via hole through the insulating layer; and forming a conductor pattern layer and a via conductor on a surface of the insulating layer, the surface of the insulating layer not facing the conductor layer, and on an inner wall of the via hole, respectively, to connect

the conductor pattern layer and the conductor layer via the via conductor.